board personnel. During emergency situations prior to liftoff the Space Shuttle commander has the authority to take whatever action in his/her judgment is necessary for the protection or security, safety, and well-being of all personnel on board.

[56 FR 27899, June 18, 1991]

### §1214.701 Definitions.

- (a) Space Shuttle Elements consists of the Orbiter, an External Tank, two Solid Rocket Boosters, Spacelab, Upper Stage Boosters (Solid Spinning Upper Stage and Interim Upper Stages) and others as specified in NASA Management Instruction 8040.9.
- (b) The *flight crew* consists of the commander, pilot, and mission specialist(s).
- (c) A flight is the period from launch to landing of a Space Shuttle—a single round trip. (In the case of a forced landing the Space Shuttle commander's authority continues until a competent authority takes over the responsibility for the Orbiter and for the persons and property aboard.)
- (d) The *flight-phases* consist of launch, in orbit, deorbit, entry, landing, and postlanding.
- (e) A payload is a specific complement of instruments, space equipment, and support hardware/software carried into space to accomplish a scientific mission or discrete activity.
- (f) Personnel on board refers to those astronauts or other persons actually in the Orbiter or Spacelab during any flight phase of a Space Shuttle flight (including any persons who may have transferred from another vehicle) and including any persons performing extravehicular activity associated with the mission

[45 FR 14845, Mar. 7, 1980, as amended at 56 FR 27899, June 18, 1991]

## § 1214.702 Authority and responsibility of the Space Shuttle commander.

- (a) During all flight phases of a Space Shuttle flight, the Space Shuttle commander shall have the absolute authority to take whatever action is in his/ her discretion necessary to:
  - (1) Enhance order and discipline,
- (2) Provide for the safety and well being of all personnel on board, and

(3) Provide for the protection of the Space Shuttle elements and any payload carried or serviced by the Space Shuttle.

The commander shall have authority throughout the flight to use any reasonable and necessary means, including the use of physical force, to achieve this end.

- (b) The authority of the commander extends to any and all personnel on board the Orbiter including Federal officers and employees and all other persons whether or not they are U.S. nationals.
- (c) The authority of the commander extends to all Space Shuttle elements, payloads, and activities originating with or defined to be a part of the Space Shuttle mission.
- (d) The commander may, when he/she deems such action to be necessary for the safety of the Space Shuttle elements and personnel on board, subject any of the personnel on board to such restraint as the circumstances require until such time as delivery of such individual or individuals to the proper authorities is possible.

[45 FR 14845, Mar. 7, 1980, as amended at 56 FR 27900, June 18, 1991]

## §1214.703 Chain of command.

- (a) The Commander is a career NASA astronaut who has been designated to serve as commander on a particular flight, and who shall have the authority described in §1214.702 of this part. Under normal flight conditions (other than emergencies or when otherwise designated) the Space Shuttle commander is responsible to the Flight Director, Johnson Space Center, Houston, TX.
- (b) The *pilot* is a career NASA astronaut who has been designated to serve as the pilot on a particular flight and is second in command of the flight. If the commander is unable to carry out the requirements of this subpart, then the pilot shall succeed to the duties and authority of the commander.
- (c) Before each flight, the other flight crew members (Mission Specialists) will be designated by the Director of Flight Operations, Johnson Space Center, Houston, TX, in the order in which they will assume the authority of the commander under this subpart

#### § 1214.704

in the event that the commander and pilot are both not able to carry out their duties.

(d) The determinations, if any, that a crew member in the chain of command is not able to carry out his or her command duties and is, therefore, to be relieved of command, and that another crew member in the chain of command is to succeed to the authority of the commander, will be made by the Director of the Johnson Space Center.

[45 FR 14845, Mar. 7, 1980, as amended at 47 FR 3095, Jan. 22, 1982; 56 FR 27900, June 18, 1991]

#### § 1214.704 Violations.

- (a) All personnel on board a Space Shuttle flight are subject to the authority of the commander and shall conform to his/her orders and direction as authorized by this subpart.
- (b) This regulation is a regulation within the meaning of 18 U.S.C. 799, and whoever willfully violates, attempts to violate, or conspires to violate any provision of this subpart or any order or direction issued under this subpart shall be fined not more than \$5,000 or imprisoned not more than 1 year, or both.

[45 FR 14845, Mar. 7, 1980, as amended at 56 FR 27900, June 18, 1991]

# Subpart 1214.8—Reimbursement for Spacelab Services

SOURCE: 50 FR 30809, July 30, 1985, unless otherwise noted.

#### §1214.800 Scope.

This subpart 1214.8 establishes the special reimbursement policy for Spacelab services provided to Space Transportation System (STS) customers governed by the provisions of subpart 1214.1 or subpart 1214.2. It applies to flights occurring in the second phase of STS operations (U.S. Government fiscal years 1986, 1987, and 1988). The following five types of Spacelab flights are available to accommodate payload requirements:

- (a) Dedicated-Shuttle Spacelab flight [Ref. §1214.804(e)].
- (b) Dedicated-pallet flight [Ref. § 1214.804(f)].

- (c) Dedicated-FMDM/MPESS (flexible multiplexer-demultiplexer/multipurpose experiment support structure) flight [Ref. § 1214.804(f)].
- (d) Complete-pallet flight [Ref. § 1214.804(g)].
- (e) Shared-element flight [Ref. §1214.804(h)].

#### § 1214.801 Definitions.

- (a) Shuttle policy. The appropriate subpart (1214.1 or 1214.2) governing use of the Shuttle. Determinaltion of the appropriate subpart for each customer shall be made by reference to §§1214.101 and 1214.201.
- (b) Spacelab elements. Pallets (3-meter segments), pressurized modules (long or short), and the FMDM/MPESS (1-meter cross-bay structure), all as maintained in the NASA-approved Space lab configuration.
- (c) Standard flight price. The price for standard Shuttle and standard Spacelab services provided. If a customer elects not to use a portion of the standard services, the standard flight price shall not be affected.
- (d) Shuttle load factor. The parameter used to compute the customer's pro rata share of Shuttle services and used to compute the Shuttle charge factor. Means of computing this parameter are defined in §1214.813.
- (e) Spacelab load fraction. The parameter used to compute the customer's pro rata share of each element's services and used to compute the element charge factor. Means of computing this parameter are defined in § 1214.813.
- (f) Shuttle charge factor and element charge factor. Parameters used in computation of the customer's flight price. Means of computing these parameters are defined in §1214.813.
- (g) Dedicated flight price for Spacelab missions. (1) The single-shift operation dedicated flight price for Spacelab missions is identical to the Shuttle dedicated flight price as defined in the Shuttle policy.
- (2) The two-shift operation dedicated flight price for Spacelab missions is the sum of:
- (i) The Shuttle dedicated flight price as defined in the Shuttle policy.
- (ii) The standard price for additional services required to support a second shift of on-orbit operations.